

Abstract

A claw-pole rotor for an electrical machine, in particular a rotary current
5 generator, having two pole wheels (26, 27), which each carry claw poles (28 and
29, respectively), which each originate in a plate region (50) and have a pole root
(53), and on a circumference of the claw-pole rotor (20), claw poles (28, 29) of the
pole wheels (26, 27) are located in alternation, and located between the claw
poles or interstices (90), and a claw pole (28, 29) has a radially outward-oriented
10 cylindrical-jacketlike surface (43), by which a pivot axis (65) is defined, and a
chamfer (68) extends on the one hand in a circumferential direction and on the
other in an edge direction of a claw pole (28 and 29, respectively), wherein the
chamfer (68) has a center portion m in the edge direction that intersects a
transition plane (59) which demarcates the pole root (53) and the freely projecting
15 part of the claw pole (28 and 29, respectively), and the center portion m amounts
to $8/10$ of the length, oriented in the edge direction, of the chamfer (68); and that
the claw pole (28, 29) has a width B_k , oriented in the circumferential direction, and
a half width B_k on the cylindrical surface (43), in a plane of the claw pole (28, 29)
that is vertical to the pivot axis (65), defines a point (P), and a tangent (T) can be
20 inscribed into this point (P), and an angle of inclination α which has a magnitude of
between 15° and 25° is enclosed between the tangent (T) and the chamfer (68) in
the plane that is vertical to the pivot axis (65).

(Fig. 3)